

MIMOSA: Notes and novelties from Colombia

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Among the undetermined Mimosa specimens in the United States National Herbarium were a few Colombian collections annotated by the late Ellsworth P. Killip as possibly new species. Examination of the material indicates that three collections may be referred to previously described taxa and two represent new species. Two other, more recent collections, are the basis for a third new species. In the course of checking the already known species of Colombian Mimosa two names more or less in limbo caught my attention, M. retusa and M. carthagenensis. Following are descriptions of the new species and comments on the others.

1. MIMOSA RETUSA Jacq. Enum. Pl. Carib. 34. 1760; Sel. Stirp. Am. 267. 1763. Fol.

At the British Museum (Natural History) I came upon a specimen that I take to be the holotype of Mimosa retusa Jacq., actually an Acacia and a prior name for A. riparioides (Britt. & Rose) Standl. or A. riparia H.B.K. sens. lat. Bentham placed M. retusa in synonymy under Acacia riparia, "ex descr." (Trans. Linn. Soc. 30: 528. 1875). The name otherwise has been ignored until recently when Howard, on the basis of Bentham's opinion, published the combination, Acacia retusa (Jacq.) K.A.Howard (Jour. Arn. Arb. 54: 459. 1973). The assumed holotype at BM is meager. It consists of a portion of a leaf, a rachis with 5 1/2 pair of pinnae. However, that is enough for identification with more complete specimens. Jacquin's original description of M. retusa is too brief to allow satisfactory determination as to species or as to type specimen but more information was given in the later publication. In that, the phrase, "Folia partialia sexjugata", suggests that the specimen was incomplete at its gathering. The pods, "Legumina oblonga, obtusa cum acumine, plana, sicca, membranacea, unilocularia," are now missing from the sheet. I was alerted to the specimen's possible importance because someone, in a hand not recognized, apparently not Jacquin's, had penciled at the bottom of the sheet, "Mimosa retusa."

The complex of species to which Acacia retusa belongs is in need of study. There are a dozen or more names for one or more taxa occurring in the neotropics, from México and Central America, the West Indies, and southward into Perú and Argentina. I believe that the name, Acacia retusa, based on material from Cartagena, should be applied to populations from the Caribbean area and Central America. Whether A. riparia H.B.K., A. lorentensis Standl., and A. tubulifera Benth. from Perú are synonymous is debatable. The decision awaits scrutiny of the types and comparison with collections from the entire geographic range of the complex.

2. MIMOSA CARTHAGENENSIS P. Miller ? ex auct. /T. Martyn ?/. Figures of beautiful, useful, and uncommon plants described in the Gardeners Dictionary by the late Philip Miller 2: 72, pl. 291. 1809.

The discovery of the sheet of Mimosa retusa Jacq. at the BM was fortuitous. I was looking for a voucher of Mimosa carthagenensis, a species name brought to my attention by Dr. Elizabeth McClintock. I did not find a specimen so annotated nor did I find one that was obviously a model for the illustration of plate 291. There is a sheet, however, at the BM, ex Herb. Miller, that might have some relevance. It bears flowers and fruit as in the illustration which, without the binomial name, was first published by Philip Miller in his "Figures of the most beautiful, useful and uncommon plants described in the Gardeners Dictionary," 1755-1760 and 1771. According to the text of the 1809 publication, "This species was found at Carthagenia in New Spain by Dr. Houstoun and does not agree with any of the Mimosas enumerated in the Dictionary." From the illustration it appears that M. carthagenensis is yet another synonym of Acacia retusa. The name, Mimosa carthagenensis, has not been included in the Index Kewensis.

3. MIMOSA ANNULARIS Spruce ex Benth. Trans. Linn. Soc. 30: 419. 1875; in Mart. Fl. Brae. 15(2): 362. 1876.

This species, typified by the collection of R. Spruce 2893 (K), from Amazonas, Brazil, in "capoeiras, ad Panuré juxta Rio Uapés," has not been reported previously from Colombia. The following collections, rather than representing new species, may be referred to Mimosa annularis: G. Gutiérrez V. & R. E. Schultes 702, Vaupés, "alrededores de Miraflores, 300 mts. de alt., Enero 29, 1944" (COL, US); H. García Barriga 13862, "Amazonas-Vaupés: Río Apaporis, entre los ríos Kananarí y Pacoa, alt. 250 m., Dec. 1-15, 1951" (COL).

4. MIMOSA PUDICA L. var. TETRANDRA (Humb. & Bonpl. ex Willd.) DC. Prod. 2: 426. 1825.

After examining various specimens and reading the comments by Brennan (Kew Bull. 1955: 187. 1955) I believe that the collection, J. Cuatrecasas 7648, Vaupés, "San José del Guaviare, sabana, 240 m. alt.", 11 Nov. 1939 (COL, US) is not a new species but may be assigned to the variety given above. The type, collected by Humboldt and Bonpland is from Antioquia, near Garrapatas. Other Colombian collections cited by Brennan are: Langlassé 65, Arbelaez, 8 Feb. 1876, and André 1422.

5. MIMOSA ANTIOQUENSIS Killip ex Rudd, sp. nov.

Scandens, caulibus tetragonis, armatis, puberulentis, glabrescentibus; folia 10-20 cm. longa, axibus puberulentis, armatis ut videntur eglandulatis; petiolus 1-2 cm. longus; pinnae fere 16-jugae; foliola 25-29-juga, falcato-oblonga, 4-7 mm. longa, 1-1.3 mm. lata, acuta vel obtusa, ciliata aliter glabra, sub-2-nervia; capitula globosa; flores 5-meri, glabri, rubri; legumen oblongum, planum, glabrum, 10-12 cm. longum (immaturum) cum stipite 1-1.5 cm. longo, valvis fere 1.3 cm. latis, 12-15-articulatis, articulis 7-10 mm. longis.

Liana; stems 4-angled, armed with recurved spines 1-2 mm. long, puberulent with minute, crispate hairs especially along the angles, glabrescent; stipules linear, about 3 mm. long, caducous; leaves 10-20 cm. long, the petiole 1-2 cm. long, the axes apparently eglandular, puberulent and armed with recurved spines, longitudinally sulcate; pinnae about 16 pair; leaflets 25-29 pair, membranous, oblong-falcate, 4-7 mm. long, 1-1.3 mm. wide, acute or obtuse, ciliate, otherwise glabrous, the venation palmate, inconspicuous, 1- or 2-veined, the major vein subcentral; inflorescences axillary, racemose, the axes sulcate, puberulent like the stems; flowers red, 5-merous in globose heads about 5-7 mm. in diameter, the peduncles 10-13 mm. long; calyx 1 mm. long, glabrous; corolla 5-lobed, about 3 mm. long, the lobes separate almost to the base; stamens 5; fruit (submature) oblong, compressed, glabrous, 10-12 cm. long including stipe 1.2-1.5 cm. long, the valves about 1.3 cm. wide, 12-15-articulate, the articles 7-10 mm. long.

Type: R. D. Metcalf & J. Cuatrecasas 30082, Colombia, Antioquia, banks of Rio Cauca at Puerto Valdivia, alt. 240-260 m., 17-20 Feb. 1942 (holotype US no. 1833338).

In general appearance this species somewhat resembles M. spiciflora Karsten and M. microcephala H.B.K. but differs notably in that the former has flowers in spikes and the latter has strigose-pubescent fruit.

6. MIMOSA CUATRECASASII Rudd, sp. nov.

Fig. 1.

Scandens, caulibus teretibus vel subtetragonis, armatis, lepidotis, glabrescentibus; folia 10-12 cm. longa, axibus subteretibus, armatis vel inermibus, petiolis 5-8 cm. longo cum glandula crateriformi prope basin; pinnae 2-jugae; foliola 1-juga cum glandula crateriformi basi, laminis coriacea, falcato-ovatis, obtusis vel breviter acuminatis, fere 7-10 cm. longis, 4-6 cm. latis, supra glabris, nitidis, subtus dense sepia-lepidotis, venatione palmata, 4-5-nervia; inflorescentiae terminales, racemosae, axibus lepidotis; flores 4-meri, glabri in capitulo parvo; legumen lepidotum, oblongum, fere 11 cm. longum, 1 cm. latum, verisimiliter multiarticulatum.

Liana; stems terete or somewhat 4-angled, lepidote, glabrescent, armed with recurved spines 1-2 mm. long; stipules caducous, not seen; leaves 10-12 cm. long, the axes subterete, lepidote, armed or unarmed, the petiole 5-8 cm. long with a crateriform gland near the base; pinnae 2 pair; leaflets 1 pair with a crateriform gland near their point of attachment, the blades coriaceous, falcate-ovate, obtuse to breviter acuminate, about 7-10 cm. long, 4-6 cm. wide, the upper surface glabrous, nitid, the lower surface densely sepia-lepidote, the venation palmate, 4-5-nerved; inflorescences terminal, racemose, the axes lepidote, usually armed with recurved spines; bracts deltoid, 1 mm. long, 0.5 mm. wide; flowers (immature) 4-merous, in small globose heads; calyx glabrous, 0.3 mm. long; corolla glabrous, the lobes deltoid; fruit (on basis of persistent replum and portions of valves) about 11 cm. long, 1 cm. wide, lepidote, probably articulate.

Type: J. Cuatrecasas 10544, Colombia, Putumayo, "selva higrófila del río Putumayo en San Pedro, entre Umbría y Puerto Asís, 300 m. alt.", 10 Nov. 1940 (holotype US no. 1799170; isotype COL). Paratype: J. Cuatrecasas & R. S. Cowan 27217, Colombia, Caquetá, Florencia, "El Recluta, km. 10 de la carretera a Gabinete; restos de selva, 600-700 m. alt.", 22 Jan. 1969 (US).

With its large leaflets, this species superficially resembles M. colombiana Britton & Killip, from farther north in Colombia and M. extensissima Ducke, from the lower Amazon region of Brazil, but those species lack the lepidote indument. Mimosa trianae Benthams is lepidote-glandular but the flowers are borne on long spikes instead of globose heads. Additional material of M. cuatrecasasii is needed to establish relationship with other species. Especially needed are collections with mature flowers so that the stamen number can be determined, whether 4 or 8. It is interesting to note on very young leaves that the petiolar gland attains its mature diameter of 1-2 mm. when the leaflets are scarcely larger, i.e., about 1/100 their mature size.

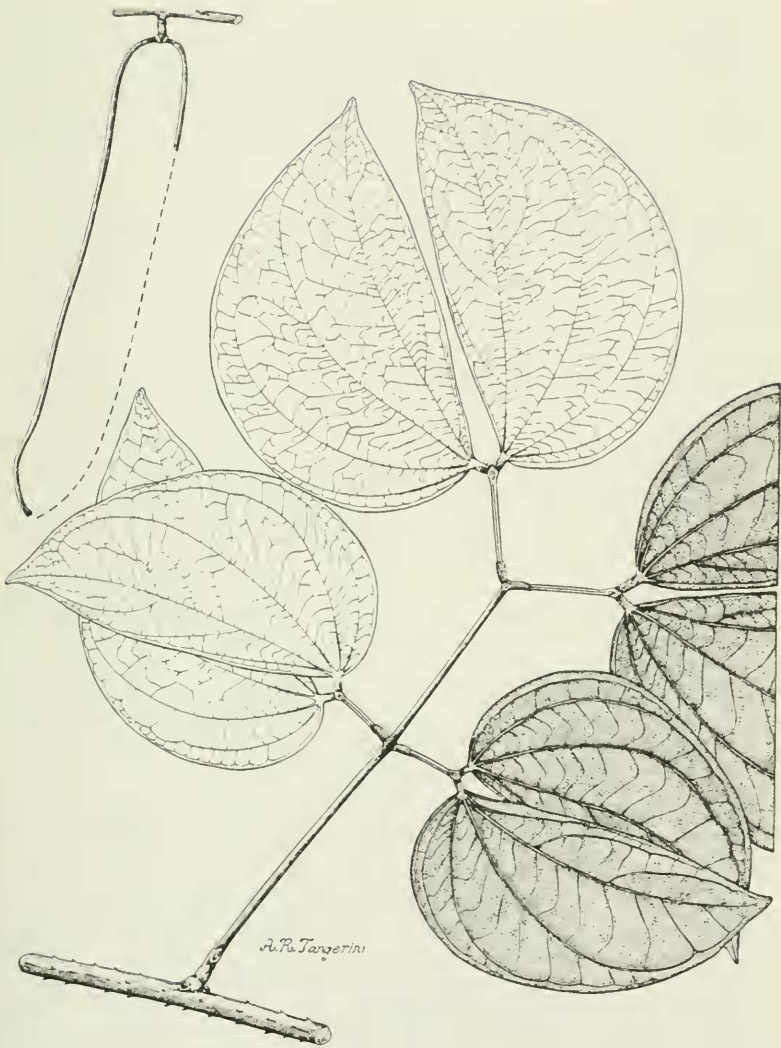


Fig. 1. Mimosa cuatrecasatii Rudd